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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/130,593	08/07/1998	HERBERT GUST	P5007.7US	6479

30008 7590 07/09/2003

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EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

28

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/130,593	GUST, HERBERT	
	Examiner	Art Unit	
	Sandra M. Nolan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-16 are pending.

Rejection Withdrawn

2. The 35 USC 112 rejection of claim 16 for indefiniteness, as set out in section 4 of the 05 December 2002 office action (Paper No. 25), is withdrawn in view of the amendment to the claim in the response dated 05 May 2003 (Paper No. 27).

Rejection Maintained

3. The 35 USC 103 rejection of claims 1-16 as unpatentable over Okumura et al (US 5,693,236), as expressed in section 6 of Paper No. 25, is maintained for reasons of record.

Response to Arguments

4. Applicant's arguments filed in Paper No. 27 have been fully considered but they are not persuasive.

The arguments in Paper No. 27 will be responded to in the order in which they were presented there.

On page 3 of Paper No. 27, applicant argues that the invention deals with bonding components containing fluoropolymers (F resins) with other materials [presumably non-F resins].

However, the claims do not state that the component to which the F resin is bonded is not an F resin component. Accordingly, the claims read on bonding F resin components to each other.

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On page 3, applicant argues that the invention is not concerned with protecting surfaces from the effects of water.

However, the purpose for which the two components are bonded is not material here. The claims recite bonding two components via the plasma activation of one of them. The goal to be achieved by the bonding is not important.

In the paragraph bridging pages 3 and 4, applicant argues that, in accordance with claim 1 of Okumura, one surface is plasma treated and an F resin surface is bonded thereto.

However, claim 1 of Okumura says nothing about F resins, so that the argued interpretation this is not accurate.

On page 4, applicant argues that the pitted surface of Okumura is for improving its water repellency and has nothing to do with the application of F resin coatings.

However, the pitted surface of Okumura is coated with a water repellant substance (see the last two lines of its abstract). Whether or not the "pitting" is carried out to render the surface water repellent is not relevant to the fact that that surface is, in fact, coated with another material.

In the paragraph bridging pages 4 and 5, applicant argues that needle-like coatings are applied via a variety of processes.

However, the needle-like coatings are applied to a surface to prepare it for the application of water repellent coatings. Thus, the surface is prepared for coating by a technique--which technique is termed "etching" at col. 4, lines 66+---that prepares it to receive the Okumura coatings.

In the last full paragraph on page 5 and the bridging paragraph onto page 6, applicant argues that his invention relates to etching an F resin surface and not a surface that does not contain an F resin.

However, this argument is not persuasive because:

- (1) Okumura does not say that his base, or coated, material is not an F resin, and
- (2) applicant has not shown that etching the F resin layer applied to the substrate instead of the substrate produces any unexpected results.

On page 6, applicant argues that the prior art does not teach a sandblasting effect and chemical changes within the F resin surface.

However, the etching of Okumura produces a needle-like surface (according to its abstract and Figure 1). In the absence of convincing objective evidence to the contrary, this needle-like surface is deemed an etched surface, similar to the "sand-blasted" surface that applicant employs.

Also, there is little in the application to support the allegation that applicant's etching produces both "sandblasting effects and chemical change" in the surface that is etched. In fact, the passage at page 3, lines 9-11 infers that the micro-sandblasting effect and any chemical changes may be *alternative* results [note the use of "and/or" between sandblasting and chemical changes as effects].

On page 6, applicant argues that this process give both "sandblasting effects and chemical change" to the etched surface.

However, as stated above, page 3 of the specification suggests that the two effects do not need to occur simultaneously.

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On page 6, applicant argues that the needle-like surface of the reference has water repellency on its own and that this is a difference over the claims here.

However, applicant has not recited a limitation in his claims that either of his members cannot repel water. Also, if the Okumura surfaces had adequate water repellency without its coatings, there would be no reason to apply water repellent coatings to them.

In the paragraph bridging pages 6 and 7, applicant argues that Okumura makes a water wettable surface water repellent, while he makes a water repellent F resin surface wettable via etching.

However, the purpose for which the etching step is used is not material. Applicant is claiming a component in which members--at least one of which contains an F resin--are adhered to one another by the intermediate step of etching the surface of one member. In the absence of convincing objective evidence to the contrary, it make no difference to the final product which of the two members is etched.

On page 7, applicant argues that his micro sandblasting technique gives surface enlargement but does not produce a needle-like structure.

However, the record does not say/show how a micro sandblasted appears. It may in fact have a needle-like appearance. Also, the etched surface of the Okumura article, as shown in Figure 1, has a larger surface area because of the needle-like projections on it. Therefore, surface enlargement *is* effected by the Okumura etching.

On page 7, applicant argues that the material to be treated is comprised exclusively or primarily of C and F and after sandblasting wettable F resin surfaces

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(such that they can be bonded with only pressure or heat treatment) and enlarged surfaces are produced.

However, the claims say that the treated surface is “comprised of” fluorocarbon, so that no “exclusive” or “primary” chemical feature is called for. As to enlarged surfaces, the discussion of enlargement above is relevant and will not be repeated. Changes in the wettability of the etched surface—i.e., increases or decrease—would be determined by the nature of the surface being etched.

On page 7, at the bottom and on page 8 at the top, applicant argues that his process uses a single step while Okumura uses more than one.

However, the claims at issue are article claims. Arguments regarding the processes used are not material to the patentability of the articles claimed.

On page 8, applicant argues that the enlarged surface made using plasma activation means that the contact surface and the adhesive surface are enlarged.

The examiner agrees with this statement. The Okumura technology is premised upon the use of “etching” to achieve the same result.

On page 8, applicant argues that the goal and the means for achieving the goal are different in the instant claims and in the Okumura patent.

However, the use of etching to make a coating adhere better is the basis of both concepts. Therefore, the goal and the means are in fact similar and the Okumura patent is suggestive of the claimed articles.

Final Rejection

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is 703/308-9545. The Examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

Her supervisor, Harold Pyon, can be reached at 703/308-4251. The general fax number is 703/305-5436. The fax number for after final communications is 703/872-9310. The receptionist answers 703/308-0661.



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